EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Cuviello on 1/26/10.

The application has been amended as follows: Claims 1-27 (Canceled).

28. (Currently Amended) A method, comprising:

receiving, at an operations center including one or more processors, ~~a head-end of television program delivery system~~ a plurality of virtual objects targeted to a plurality of different groups of viewers, wherein said ~~head-end~~ operations center is configured to communicate with a terminal;

identifying at the ~~head-end~~ operations center a plurality of virtual object locations within each of a plurality of frames of a video program;

creating a plan which includes rules for selecting, for each of the virtual object locations, one of the plurality of virtual objects to display in that virtual object location, the rules based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers; and

transmitting, from the operations center, said video program, one or more of the plurality of virtual objects, and said plan to said terminal, wherein said one or more of the plurality of virtual objects are separate from said video program.

29. (Previously Presented) The method of claim 28, further comprising:

generating a group assignment matrix, wherein the group assignment matrix associates the terminal with one of the different groups of viewers; and

transmitting said group assignment matrix to said terminal.

30-31. (Canceled)

32. (Previously Presented) The method of claim 28, further comprising adjusting the rules based on recorded virtual objects watched data received from the terminal.

33-36. (Canceled)

37. (Currently Amended) An operations center ~~located at a head end, in a television program delivery system~~, comprising:

a database for storing a plurality of virtual objects targeted to a plurality of different groups of viewers; and

one or more processors configured for:

identifying a plurality of virtual object locations within each of a plurality of frames of a video program;

creating a plan which includes rules for selecting, for each of the virtual object locations, one of the plurality of virtual objects to display in that virtual object location, the rules based on

measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers; and

transmitting said video program, one or more of the plurality of virtual objects, and said plan to a terminal ~~through said television program delivery system,~~ wherein said one or more of the plurality of virtual objects are separate from said video program.

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38. (Previously Presented) The operations center of claim 37, wherein said one or more processors are further configured for:

generating a group assignment matrix, wherein the group assignment matrix associates the terminal with one of the different groups of viewers; and

transmitting said group assignment matrix to said terminal.

39-43. (Canceled)

44. (Previously Presented) The operations center of claim 37, wherein said one or more processors are further configured for adjusting the rules based on stored virtual objects viewed data received from the terminal.

45-47. (Canceled)

48. (Currently Amended) A method comprising:

receiving a video program at a terminal ~~over a television broadcast system~~, the video program including a plurality of virtual object locations within a sequence of video frames;

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receiving a plurality of virtual objects at the terminal~~, each~~ wherein the virtual objects are displayable in ~~each of~~ the virtual object locations, the virtual objects are targeted to a plurality of different groups of viewers, and the virtual objects are separate from the video program;

receiving a plan including rules for the selecting at the terminal, for each virtual object location, a virtual object of the plurality of virtual objects to display in that virtual object location based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers;

selecting at the terminal, for each virtual object location, ~~a~~ the virtual object of the plurality of virtual objects to display in that virtual object location based on the plan~~measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers~~; and

outputting the video program from the terminal with each virtual object location displaying the virtual object selected to be displayed for that virtual object location.

49. (Previously Presented) The method of claim 48 wherein the selecting is further based on a ranking of pairs of each virtual object with each of the different groups of viewers.

50. (Previously Presented) The method of claim 48 further comprising associating the terminal with one of the different groups of viewers, wherein the selecting is further based on the associating.

51. (Previously Presented) The method of claim 48, wherein one of the virtual object locations moves spatially from one frame to a next frame in the sequence of frames.

52. (Previously Presented) The method of claim 48, wherein two of the plurality of virtual object locations are in different spatial locations within a frame of the sequence of frames.

53. (Previously Presented) The method of claim 48, further comprising:

storing viewer specific data, wherein the selecting is further based on the viewer specific data.

54. (Previously Presented) The method of claim 48, wherein the outputting the video program is a first presentation of the video program, the method further comprising:

outputting the video program from the terminal as a second presentation of the video program with one of the virtual object locations displaying a different virtual object than displayed during the first presentation.

55. (Previously Presented) The method of claim 54, further comprising:

selecting the different virtual object for display in the one virtual object location based on receiving updated virtual objects.

56. (Previously Presented) The method of claim 54, further comprising:

selecting the different virtual object for display in the one virtual objection location based on user specific data stored in the terminal.

57. (Canceled)

58. (Currently Amended) The method of claim ~~57~~48, further comprising:

adjusting the plan based on viewer specific data stored in the terminal.

59. (Currently Amended) A terminal comprising:

one or more receivers configured to receive:

a video program at the terminal~~over a television broadcast system,~~ wherein the video program includes ~~including~~ a plurality of virtual object locations within a sequence of video frames, ~~and configured to receive~~

a plurality of virtual objects~~at the terminal~~, ~~each~~ wherein the virtual objects are displayable ~~in each of~~ the virtual object locations, the virtual objects are targeted to a

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plurality of different groups of viewers, and the plurality of virtual objects are separate from the video program, and

a plan including rules for the selecting at the terminal, for each virtual object location, a virtual object of the plurality of virtual objects to display in that virtual object location based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers; and

one or more processors configured to:

select, for each virtual object location, ~~a~~ the virtual object of the plurality of virtual objects to display in that virtual object location based on the plan, and ~~measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers, and configured to~~

output the video program with each virtual object location displaying the virtual object selected to be displayed for that virtual object location.

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60. (Previously Presented) The terminal of claim 59 wherein the selecting is further based on a ranking of pairs of each virtual object with each of the different groups of viewers.

61. (Previously Presented) The terminal of claim 59 wherein:

the one or more processors are configured to associate the terminal with one of the different groups of viewers, and

the selecting is further based on the associating of the terminal with the one of the different groups of viewers.

62. (Previously Presented)The terminal of claim 59, wherein one of the virtual object locations moves spatially from one frame to a next frame in the sequence of frames.

63. (Previously Presented) The terminal of claim 59, wherein two of the plurality of virtual object locations are in different spatial locations within a frame of the sequence of frames.

64. (Previously Presented) The terminal of claim 59, further comprising:

a memory configured to store viewer specific data, wherein the selecting is further based on the viewer specific data.

65. (Previously Presented) The terminal of claim 59, wherein:

the one or more processors are configured to output the video program in a first presentation and a second presentation of the video program, the second presentation having one of the virtual object locations displaying a different virtual object than displayed during the first presentation.

66. (Previously Presented) The terminal of claim 65, wherein:
the one or more processors are configured to select the different virtual object for display in the one virtual object location based on receiving updated virtual objects.

67. (Previously Presented) The terminal of claim 65, wherein:
the one or more processors are configured for selecting the different virtual object for display in the one virtual objection location based on user specific data stored in the terminal.

68. (Canceled)

69. (Previously Presented) The terminal of claim ~~68~~59, further comprising:

a memory configured to store viewer specific data, wherein the one or more processors are configured for adjusting the plan based on the viewer specific data.

70. (Currently Amended) A method ~~for placing virtual objects in virtual object locations in a video program~~, comprising:

receiving, at an operations center including one or more processors, ~~a head-end of television program delivery system~~ a plurality of virtual objects targeted to a plurality of

different groups of viewers, wherein said operations center ~~head end~~ is communicatively coupled to a terminal;

identifying at the ~~head end~~operations center a plurality of virtual object locations within each of a plurality of frames of the video program;

creating a plan which, for each of the virtual object locations within each of the plurality of frames, indicates rules for selecting one of the plurality of virtual objects to display in that virtual object location, the rules based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers;

transmitting, from the operations center, said video program, one or more of the plurality of virtual objects, and said plan to said terminal, wherein said one or more of the plurality of virtual objects are separate from said video program;

selecting at the terminal, for each virtual object location, a virtual object of the plurality of virtual objects to display in that virtual object location based on the plan; and

outputting the video program from the terminal with each virtual object location displaying the virtual object selected to be displayed for that virtual object location.

Allowable Subject Matter

Claims 28, 29, 32, 37, 38, 48-56, 58-67, and 69-70 allowed.

The following is an examiner's statement of reasons for allowance:

Prior art either alone or in combination doesn't show or teach "a plurality of virtual objects targeted to a plurality of different groups of viewers, wherein said operations center is configured to communicate with a terminal;

identifying at the operations center a plurality of virtual object locations within each of a plurality of frames of a video program;

creating a plan which includes rules for selecting, for each of the virtual object locations, one of the plurality of virtual objects to display in that virtual object location, the rules based on measures of compatibility between image content surrounding that virtual object location and each of the different groups of viewers; and

transmitting, from the operations center, said video program, one or more of the plurality of virtual objects, and said plan to said terminal, wherein said one or more of the plurality of virtual objects are separate from said video program." in combination with other features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SIMON KE whose telephone number is (571)272-4062. The examiner can normally be reached on M-Th and Alternate Fridays 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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